Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. - 34. (Cancelled)

35. (New) A modified pokeweed antiviral protein (MPAP) comprising substitution of one or more amino acids positioned at least 10 angstroms from Arg179 of wild-type PAP (SEQ ID NO:1), wherein said substitution of one or more amino acids modifies at least one hydrophobic contact between adjacent alpha-helicies.

36. (New) The MPAP of claim 35, comprising substitution of one or more amino acids within α helix 4-loop-α helix 5 region.

37. (New) The MPAP of claim 36, comprising substitution of one or more of the following amino acids: Tyr76, Lys151, Ile152, Phe158, Thr162, or Thr166.

38. (New) The MPAP of claim 35, wherein amino acid Lys151 is substituted.

39. (New) The MPAP of claim 35, comprising the substitution Lys151Ala.

40. (New) The MPAP of claim 35, wherein amino acid Ile152 is substituted.

41. (New) The MPAP of claim 35, comprising the substitution Ile152Ala.

42. (New) The MPAP of claim 35, comprising one or more substitution in a C-terminal portion of α helix 6 or within a helix adjacent to the C-terminal portion of α helix 6.

43. (New) The MPAP of claim 42, comprising substitution of one or more of the following amino acids: Ile13, Tyr16, Ile142, Lys188, Phe191, or Asp192.

44. (New) The MPAP of claim 35, comprising substitution of amino acid Phe191.

45. (New) The MPAP of claim 35, comprising the substitution Phe191Ala.

46. (New) The MPAP of claim 35, comprising substitution of amino acid Asp192.

47. (New) The MPAP of claim 35, comprising the substitution Asp192Gly.

48. (New) The MPAP of claim 35, wherein the substitution comprises Lys151Ala, Ile152Ala, Phe191Ala, Asp192Gly, or combinations thereof.

49. (New) The MPAP of claim 48, wherein the substitution comprises Lys151Ala and Ile152Ala.

50. (New) The MPAP of claim 35, wherein the substitution comprises Phe191Ala and Asp192Gly.

51. (New) A modified pokeweed antiviral protein (MPAP) comprising substitution of one or more amino acids positioned at least 10 angstroms distance from reference amino acid Arg179 of wild-type PAP (SEQ ID NO:1), wherein said substitution modifies hydrophobic packing between adjacent alpha-helicies, such that MPAP-mediated depurination of viral RNA is greater than MPAP-mediated depurination of ribosomal RNA.

52. (New) The MPAP of claim 51, wherein the viral RNA comprises retroviral RNA.

53. (New) The MPAP of claim 51, wherein the viral RNA comprises HIV-1 RNA.

54. (New) The MPAP of claim 51, wherein the viral RNA comprises RNA of a drug resistant HIV-1 strain.

55. (New) The MPAP of claim 51, wherein a ratio of MPAP-mediated depurination of viral RNA to PAP-mediated depurination of ribosomal RNA is greater than 5 to 1.

56. (New) A modified pokeweed antiviral protein (MPAP) comprising substitution of one or more amino acids positioned at least 10 angstroms distance from Arg179 of wild-type PAP (SEQ ID NO:1), wherein said substitution modifies hydrophobic packing between adjacent alpha-helicies, such that MPAP-mediated depurination of viral RNA is increased relative to that mediated by wild-type PAP.

57. (New) The MPAP of claim 56, wherein the viral RNA comprises retroviral RNA.

58. (New) The MPAP of claim 57, wherein the viral RNA comprises HIV-1 RNA.

59. (New) The MPAP of claim 57, wherein the viral RNA comprises RNA of a drug resistant HIV-1 strain.

60. (New) The MPAP of claim 57, wherein a ratio of MPAP-mediated depurination of viral RNA to wild-type PAP-mediated depurination of viral RNA is greater than 2 to 1.

61. (New) A composition comprising MPAP according to claim 35 and a pharmaceutically acceptable carrier.

62. (New) The composition of claim 61, further comprising one or more nucleoside analog reverse transcriptase inhibitor (NRTI), non-nucleoside analog reverse transcriptase inhibitor (NNRTI), protease inhibitor (PI), or combinations thereof.

63. (New) A method for inhibiting viral replication comprising contacting a virus with MPAP according to claim 35.

64. (New) The method of claim 63, wherein the virus comprises human immunodeficiency virus (HIV).

65. (New) The method of claim 63, wherein the virus comprises HIV-1 virus.

66. (New) The method of claim 63, wherein the virus comprises a drug resistant HIV-1 virus.

67. (New) The method of claim 63, wherein virus comprises a drug resistant HIV-1 virus resistant to one or more of the following drugs: nucleoside analog, non-nucleoside analog, or protease inhibitor.

68. (New) A method for inducing depurination of viral RNA comprising contacting a virus with MPAP according to claim 35.

69. (New) A method for treating viral infection in a subject in need thereof, comprising administering to the subject MPAP according to claim 35.

70. (New) Use of MPAP according to claim 35 for inhibiting viral replication.

71. (New) Use of MPAP according to claim 35 for inducing depurination of viral RNA.

72. (New) Use of a MPAP according to claim 35 for manufacture of a medicament for treating viral infection.